Firas Mouasher
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Final Report

History and Implications of the NYPDs use of Published Crime Data

While the regression analysis was a meaningful component of the project, and provided valuable insights and trends, taking a step back to understand the history and origins of the original NYPD felonies dataset serves a meaningful purpose as well. Therefore, this paper plans to focus the final discussion on the publicly available crime data that was used as the foundation for this project, its evolution and use by the NYPD today, and how it has sparked negative implications despite initially providing the NYC community and other enforcement agencies with strong benefits.

Origins of the NYPD Dataset

The New York Police Department (NYPD) maintains statistical data as a management tool to reduce crime, to improve training and protocols, and to provide transparency to the New York public and other stakeholders. The advent of real-time, crime-related data has driven crime to lows not seen in NYC since the 1960s. While the use of publicly available crime data may seem entirely positive on its surface, its overreliance by the NYPD has resulted in negative implications, particularly in relation to data integrity and ethical considerations.

The notion that government activities and data should be "open" date back to NYC in the early 20th century, when Progressive Era reformers "fought for legal remedies to the corrupt ward politics and favors-trading power brokerage characterized by the Tammany Hall political machine".[1] These reformers wanted to ensure that public officials acted in the best interest of

the public. In 1993, the NYC Commission on Public Information and Communication (COPIC) created a Pubic Data Directory in order to better manage information and make it more accessible to the public by leveraging improvements in technology and the World Wide Web.

Crime was an important concern for residents of New York in the early 1990s and it played a central role in the city's 1993 mayoral election.[3] Lou Anemone, NYPD's Chief of Department in 1994, said that, "during the early 1990s there was very bad violent crime and pervasive fear of crime in the community, and this likely contributed to Mayor David Dinkins' loss to Rudy Giuliani in 1993."[4] After Mayor Giuliani's win, he and his election of Police Commissioner, Bill Bratton, proposed safer streets, reduced crime, and quality of life improvements to the city of New York. However, to drive these efforts to achieve a safer NYC relied on timely crime statistics, and the NYPD was limited in collecting crime data for FBI reporting purposes only, so the statistics were not readily available for timely analytics. Another hurdle was that officers did not have the capacity in their schedule to focus on crime prevention as they were too busy responding to 911 calls.

As the NYPD's focus shifted to focusing more on crime prevention, Bratton and his command staff created a new data-driven performance measurement system, "CompStat", in 1994. The tool sought to provide up-to-date crime-related statistics in seven major crime categories on the citywide, borough, and precinct levels. According to a 1996 article appearing in an internal NYPD publication, the NYPD is beginning to use crime statistics to direct its enforcement efforts:

> *In the past, crime statistics often lagged events by months, and so did the sense of whether crime control initiatives had succeeded or failed. Now there is a daily turnaround*

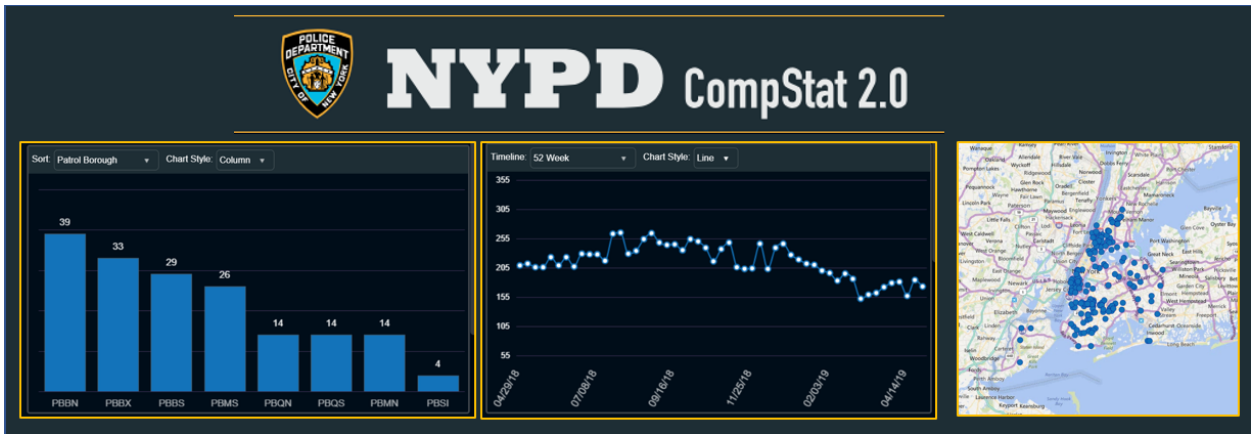
in the "CompStat" numbers, as crime statistics are called, and NYPD commanders watch weekly crime trends with the same hawk-like attention private corporations pay to profits and loss. Crime statistics have become the department's bottom line, the best indicator of how police are doing precinct by precinct and nationwide.[5]

The primary goal of the NYPD with the CompStat data tool was to reduce crime, to improve training and other procedures, and to provide the public with greater data transparency. CompStat is now used regularly in meetings with department executives and officers to analyze crime and to develop strategies to address crime-related incidents. The public is able to access the same dataset through the department's CompStat 2.0 portal.

Explanation of the CompStat 2.0 Portal

The CompStat 2.0 portal presents crime data in map or table format for seven major NYS penal law felonies: (1) murder and non-negligent manslaughter, (2) rape, (3) robbery, (4) felonious assault, (5) burglary, (6) grand larceny, and (7) grand larceny motor vehicle. Attempted crimes are recorded as that crime except for attempted murder, which is recorded in the category "Felonious Assault" and geographic coordinates are mapped to the nearest intersection.[2]

Figure 1 – Visual Illustration of the CompStat 2.0 Portal



Source: www.compstat.nypdonline.org

The Evolution of CompStat

When CompStat launched in each of NYC's 76 police precincts, the city experienced a significant decline in crime rates. Police departments around the country began adopting CompStat following its successful roll-out in New York and has now transformed into the go-to, real-time dataset to track crime trends. Based on the crime data trends, department resources are then allocated to mitigate additional crime and violence in an area that is experiencing high crime rates. The system's mission is to emphasize preventative crime measures instead of responding to crimes only after they are committed. Commanders and other enforcement personnel are now accountable for knowing the nuances of crime trends in their precincts and how to cultivate an effective strategy of reducing this crime level.

Limitations of the CompStat Data

Despite its widespread adoption and impact on crime reduction in New York and other major police departments, the CompStat dataset has inherent limitations. For example, federal crimes are not included in the dataset. Further, approximately 3% of crime reports do not contain enough information to be geo-coded, and therefore are unable to be mapped accordingly.[2] Other limitations depend on where or how the crime occurred. For example, crime within the transit system is recorded at the station where the train is moving toward if it occurs in a moving train. Crimes occurring in parks, beaches, or open areas often cannot be mapped. Finally, crimes occurring on Rikers Island are recorded in the 41st precinct since arrests are adjudicated in the Bronx courts; however, police response is the responsibility of the 114th precinct because that command has physical access to the island.

Further limitations of the CompStat dataset are its innate differences in organization to the FBI's Uniform Crime Report (UCR) format which results in the two datasets being only directionally comparable. The FBI shifts the New York State penal law categories to establish national statistics that can be compared across all the states with their various penal laws. This lack of standardization in reporting between CompStat and the UCR may lead to inconsistent statistical findings as crimes are not defined in a uniform way. For example, counts of shootings in New York City are not official FBI stats; per the FBI handbook, official stats generally include fatal shootings and other killings under homicides and add nonfatal shootings to aggravated assaults committed without guns. The limitation with this reporting, though, is that most police departments do not track separate counts of shootings which may lead to subjective or faulty reporting. "You would have to pull every report and read it and determine if it fits within the criteria you are trying to break it down into," said Melissa J. Bujeda, a spokeswoman for the Jacksonville, Florida, Sheriff's Office.[10]

Limited resources and political pressures may also be an obstacle to a departments' freedom to allocate funds to address specific crimes. Police managers may not have the funding to enroll in training to fully optimize the use of the CompStat dataset to facilitate stronger decision making and strategic planning efforts. Police may also be reluctant to follow innovative approaches using data when a wrong decision might negatively affect the safety of others or drive a loss of vital department resources. Patrol officers have held a negligible role with CompStat, and some see it has a hurdle to successful policing as it further divides the role of the manager, who is using CompStat to make decisions, and street cops, who are excluded from the

CompStat data process. This might limit the discretion of the officers or lead the officers to resent the technology and its involvement in reducing crime.

Crime Statistics Might do More Harm Than Good

Given the obvious pressure officers and other enforcement personnel feel to increase numbers, artificially inflating crime statistics could occur as police and others "act out of self-preservation".[6] For example, Eli Silverman, a criminologist, and John Eterno, a former NYPD precinct captain, reveal in the book, *The Crime Numbers Game* that "in New York City, CompStat led to abusive police practices in communities of color and contributed to police commanders falsifying crime figures to bloat their numbers and make it look like some communities are committing more crimes than they are."[6]

When cops are under pressure to show higher productivity levels, they are pressured to make stops and hand out summonses they may not have otherwise done. For example, from July 2017 through June 2018, NYC spent $230 million to pay off 6,472 lawsuits due to unlawful criminal summonses which were arguably driven by an overreliance on a numbers-driven statistics system (e.g. CompStat). The city paid out $335 million for lawsuits against the police department in the year prior as well.[7] This is not just a problem in New York. All over the United States, most of the complaints about excessive police efforts are caused by overpolicing in an attempt to show more productive numbers.

An article published by the New York Times confirms the fact that pressure to reduce crime rates led some enforcement personnel to manipulate the numbers. For example, retired senior officers provided anecdotes of what the researchers believe was a frequent practice among some precinct commanders and supervisors: "checking eBay, other Web sites, catalogs or

other sources to find prices for items that had been reported stolen that were lower than the value provided by the crime victim. They would then use the lower values to reduce reported grand larcenies — felony thefts valued at more than $1,000, which are recorded as index crimes under CompStat — to misdemeanors, which are not."[8] Others mentioned, "precinct commanders or aides they dispatched sometimes went to crime scenes to persuade victims not to file complaints or to urge them to change their accounts in ways that could result in the downgrading of offenses to lesser crimes."[8] 160 of the retired members of the force mentioned they were aware of changes to crime reports and 75% of those members mentioned the changes made were unethical in nature. Ethical concerns over crime statistics are not unique to New York. Police departments have faced accusations of tampering with crime statistics in Atlanta, Baltimore, Dallas, New Orleans and Washington as well.[8]

Even if the intentional tampering of crime statistics was removed, human error also may play a role in the accuracy of the reported data. Location also plays a role in the accuracy of the crime statistics. If a location is in close proximity to a police station or hospital, for example, crime rates in those areas are likely higher. With more police present in a given area, there is a greater chance of detecting crime which could lead to more arrests and the assumption that the given area is more populated with crime than other areas that may not have the same density of enforcement focus.

Implications of Underreported Crimes

Underreported crimes also strongly influence the reliability and effectiveness of relying on a CompStat dataset to develop strategies and draw conclusions. According to the Bureau of Justice Statistics, "3.4 million violent crimes – more than half of the nation's violent crimes – go

unreported in the U.S. each year."[9] For example, the average response time by the New Orleans Police Department to emergency calls is 73 minutes, which might lead victims to consider whether calling or reporting crime is worth doing in the first place.[8] Further, most gunfire detected by an audio system installed by the NYPD did not actually get reported to 911. A study of this technology in Washington, D.C., also revealed a large difference between actual gunfire volume and 911 calls reporting it.[10]

The problem of underreporting is particularly pervasive for rape which would lead one to believe the crime trends related to rape may not be fully reliable. For example, approximately 1 in 5 rapes reported to the NYPD last year were reporting rape from years earlier, due to the number of women coming forward accusing Bill Cosby of rape. This would drive a significantly different answer with analyzing rape trends. However, since last year, the NYPD started counting delayed reports of rape which would cause the data output to become more aligned.[10]

While the NYPD maintains the CompStat statistical crime data as a management tool to reduce crime and provide greater transparency to the public and other stakeholders, sole use of this dataset has inherent data integrity limitations due to (1) its overreliance by the NYPD to force numbers and unethically manipulate data, (2) technological obstacles, such as geo-coding certain crime occurrences, (3) inconsistent standards with FBI crime reporting, and (4) other limitations, such as underreported crime and human error. Nevertheless, the advent of up-to-date crime-related statistics has driven crime to record lows in NYC since the 1960s, but the overreliance on an inherently imperfect dataset also has its drawbacks and ethical implications.

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